

## ASX:CXO Announcement

26 July 2021

### Extension Scoping Study Confirms 10 Year Lithium Production

### Highlights

- Finniss Lithium Project Mining Extension Scoping Study (Study) confirms that Core Lithium is well positioned to become a long-term lithium producer in Australia
- Study builds on and adds to the outstanding economics of the Stage 1 Definitive Feasibility Study (DFS)
- Excellent Study economics reflected in pre-tax IRR of 56% and pre-tax NPV<sub>8</sub> of A\$259 million and life-of-mine EBITDA of A\$694 million from revenue of A\$1.6 billion<sup>1</sup>
- Finniss Project's Study 10 Year production and mine plan comprises open pit production from Reserves and Resources at Grants and Hang Gong and underground at Grants, BP33 and Carlton prospects
- Low initial capital expenditure of A\$89 million remains unchanged from DFS
- C1 Operating Cost (FOB) of US\$372/t concentrate generate a robust average operating margin of more than US\$350/t
- Further potential for production expansion and increases in Mineral Resources and Ore Reserves underway, with a substantial drilling budget for 2021 and 2022
- Targeting FID for the start of construction before the end of 2021

 $^1$  Post-tax IRR & NPV\_8 are 49% & A\$193 million respectively & income tax assumptions are included in the body of this report.



### **CAUTIONARY STATEMENT**

The Mining Extension Scoping Study referred to in this announcement has been undertaken to determine the Project's potential with the inclusion of inferred material in the production profile when compared to the recently announced DFS (Refer Stage 1 DFS and Updated Ore Reserves - ASX:CXO 26/07/21). The Scoping Study is a preliminary technical and economic study of the potential viability of this Project based on low level technical and economic assessments (+/- 30% accuracy) that are not sufficient to provide any assurance of an economic development case. This report applies the same parameters as the DFS released concurrently with the Scoping Study. Further evaluation work and appropriate studies are required before the inclusion of the additional material included in the Scoping Study can be included in an economic development case.

Approximately 69% of the life of mine production is from Ore Reserves and 31% is from Inferred Mineral Resources and/or Measured and Indicated Resources that could not be converted to Ore Reserves in the DFS. The Company has concluded it has reasonable grounds for disclosing a Production Target, given that the Scoping Study assumes that in the first period of operation of each of the prospects, an average of 69% of the production is from the Measured or Indicated Resource category. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the Production Target or Scoping Study assessment will be realised. As highlighted by the DFS, the inclusion of Inferred Resources into the production profile is not a determining factor of the Project's economic viability.

The Scoping Study is based on the material assumptions outlined elsewhere in this announcement. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the potential extended production indicated in the Scoping Study, funding in the order of A\$5 million will likely be required. Investors should note that there is no certainty that the Company will be able to raise funding when needed, however the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a reasonable basis to expect it will be able to fund the incremental development of the Finniss Lithium Project. It is also possible that such funding may only be available on terms that may be dilutive to, or otherwise affect the value of the Company's existing shares.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this Scoping Study.



Advanced Australian lithium developer, **Core Lithium Ltd** (ASX: **CXO**) (**Core** or **Company**), is pleased to announce a Mining Extension Scoping Study (**Study**) has outlined lithium production over 10 years from the Company's wholly owned Finniss Lithium Project in the Northern Territory (**Finniss Project**).

The Study, which is primarily underpinned (69%) by the Ore Reserves detailed in the Definitive Feasibility Study (Refer Stage 1 DFS and Updated Ore Reserves - ASX:CXO 26/07/21), also includes Measured, Indicated & Inferred material (31%) that cannot be defined as an Ore Reserve and hence cannot provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised.

The Study demonstrates the Project's economics with the inclusion of inferred material to be compelling, with low capital costs and competitive operating costs that result in high operating margins and rapid payback.

<b>Technical Metrics</b>		<b>Financial Metrics</b>	
Total Production <sup>1</sup>	1.56 Mt	Concentrate Price (FOB) <sup>2</sup>	US\$731/t
Ave Annual Production <sup>1</sup>	175 ktpa	Cl Operating Costs <sup>3</sup>	US\$372/t
Concentrate Li <sub>2</sub> O Grade	5.8%	AISC <sup>4</sup>	US\$454/t
Total Ore Mined	9.8 Mt	Initial Capital <sup>5</sup>	A\$89m
Average Grade Mined	1.30%	Pre-Tax Free Cash Flow	A\$415m
Plant Design Throughput	1 Mtpa	Pre-Tax NPV <sub>8</sub>	A\$259m
Average Lithia Recovery	71.7%	Post-Tax NPV8	A\$193m
Mine Life	10 years	Pre-Tax IRR	56%
Payback Period <sup>6</sup>	2 years	Post-Tax IRR	49%

Key outputs are summarised below:

1. Annual production represents life of mine average following the start of commercial concentrate production.

2. Commodity Pricing assumptions are derived from Roskill April 2021 forecast and represent an average received price over the LOM. Assumptions include sea freight of US\$20/t concentrate and a pro-rata grade adjustment for 5.8% Li<sub>2</sub>O grade.

3. Cl Operating Costs are defined as direct cash operating costs of production FOB, divided by spodumene concentrate production. Direct cash operating costs include mining, processing, transport, port, and ship-loading costs. Cl Operating Costs exclude royalties and sustaining capital, with the LOM average calculated from commencement of commercial production. AUD:USD assumption is 0.70.

- 4. AISC are defined as CI Operating Costs plus royalties and sustaining capital, with the LOM average calculated from commencement of commercial production.
- 5. Initial Capital includes pre-strip mine development for the Grants Open Pit of A\$34 million.
- 6. Payback is calculated from sale of first concentrate.



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## 1. Summary

Through the DFS, Core has taken a major step forward towards becoming Australia's next lithium producer and its goal of producing high quality lithium spodumene concentrate through the mining and processing of high grade spodumene-bearing pegmatites located within one hour's drive of the Port of Darwin, Australia's closest port to Asia.

High-grade Ore Resource with an average grade of 1.30% Li<sub>2</sub>O, combined with exceptional spodumene metallurgy, will enable Core to produce high quality, coarse concentrate using gravity only Dense Media Separation (**DMS**) processing. The construction of a simple 1Mtpa DMS processing plant will enable Core to produce up to 196,000 tonnes of high-quality concentrate per annum over 10-years.

Total ore available for mining now stands at 9.8 million tonnes (Mt), with open pit mining consistent with the DFS planned at the Grants and Hang Gong deposits and underground mining at the Grants (below the open pit), BP33 and Carlton deposits.

Consistent with the DFS, modest pre-production capex of A\$89 million (including preproduction mining costs) and strong cash flows enable a rapid payback from sale of first concentrate and confirms Finniss as Australia's lowest capital intensity lithium project.

The excellent Study economics are further reflected in the pre-tax IRR of 56%, pre-tax NPV<sub>8</sub> of A\$259 million and LOM pre-tax, free cash flows of A\$415 million, from revenue of A\$1.6 billion (assuming a LOM average concentrate price of US\$731/t FOB). The Post-Tax IRR and NPV<sub>8</sub> is 49% and A\$193 million respectively with a post-tax free cash flow of A\$312 million. Assuming recent spot prices of spodumene concentrate of US\$850/t (6% FOB), the pre-tax IRR and NPV<sub>8</sub> increase to 79% and A\$384 million respectively.

LOM C1 operating costs of US\$372/t concentrate (FOB) generate a robust LOM operating margin of more than US\$350/t, assuming a LOM average sale price of US\$731/t (FOB). LOM average All-In Sustaining Costs (AISC) are similarly competitive at US\$454/t concentrate (FOB).

Core has increased aggregate Mineral Resources and Ore Reserves for the entire Finniss Lithium Project substantially since 2018 and plans to grow these further to extend the life and increase the Project's life-of-mine free cash flows. The larger Project area comprises 500km<sup>2</sup> of exploration and mining tenements covering the Bynoe Pegmatite Field.

The Finniss Lithium Project's proximity to the Port of Darwin and existing high-quality sealed roads provides access for daily road train movements to transport concentrate to port. The Project also has other substantial infrastructure advantages, including being close to grid power, gas and rail infrastructure, and being less than a 1-hour commute from the skills, trades, workshops and other services found in suburban Darwin.

Core is at the front of the line of new global lithium production, with approvals already received from the NT Government to develop one of the most capital efficient and cost competitive lithium projects in Australia.

Completion of the DFS and Scoping Studies (see further announcement released on 26/07/2021 which also assesses potential production of lithium fines, titled "Scoping Study identifies potential for Lithium Fines") now pave the way for the Company to progress debt finance opportunities and finalise offtake and customer and equity financing discussions, enabling the Company to commence development and construction by the end of this year and start delivering spodumene concentrate to customers in 2022.

This Study should be read in conjunction with "Stage I Definitive Feasibility Study and Updated Ore Reserves" dated 26/07/21).



## 2. Mineral Resources and Reserves

Core is developing the Finniss Lithium Project, located near Darwin in the Northern Territory in Australia.

The Study confirms the mining operation producing high quality lithium concentrate over of 10 years with open pit operations active for approximately five (5) years including initial prestripping requirements.

The Study, although primarily based on Ore Reserves and the DFS, also includes 2,159 kt at 1.25 % Li<sub>2</sub>O of Inferred Resource (21.6 %) that cannot be defined as an Ore Reserve and hence cannot provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Study will be realised.

In addition to the Ore Reserves listed above the Scoping Study includes 2.03 Mt at 1.2 %  $Li_2O$  of Inferred material from the underground mines and 0.2 Mt at 1.2 %  $Li_2O$  Inferred material from the open cut. Additional 0.13 Mt at 2.0 %  $Li_2O$  Measured and Indicated material became economical from the underground mines with the addition of Inferred material.

Current Total Ore Reserves of 7.3Mt and DFS support a 7-year mine life assuming open pit mining methods at Grants & Hang Gong and underground mining methods at Grants, BP33 & Carlton (Table 1).

Consistent with DFS, the Study considers mining Grants, BP33, Carlton and Hang Gong Deposits located within a 3km radius with ore trucked to a central processing plant at Grants within the area of mining lease ML 31726.

Mining operations will expand within mining leases ML 32346 and MLN16 to incorporate the underground operations at Grants (post-open-pit), BP33 and Carlton then finishing with the Hang Gong open-pit which is located approximately 1km to the east of Grants.

The subvertical shape of the deposits and excellent ground conditions at Grants, BP33 and Carlton, allowed sublevel open stoping to be selected as the mining method to provide a lower cost and lower risk method than other underground mining methods.

The underground mine design and planning was completed by independent consulting firm OreWin Pty Ltd (OreWin). OreWin is an Australian mining consultancy that specialises in all aspects of project development, from resource evaluation through to feasibility studies.

Consistent with the DFS, the key components of the Project are summarised below:

- Mining of the high-grade spodumene pegmatite deposit from multiple open-pit and underground sources
- Transfer of the spodumene pegmatite ore to a Run of Mine (ROM) pad located adjacent to the Grants open pit.
- Water-based DMS to produce a high quality spodumene (lithium) concentrate product; and
- Transport of the lithium concentrate product to Darwin Port by sealed public road for overseas export.



### Table 1 - Ore Reserve Table

	Mt	Li <sub>2</sub> O (%)	Contained Li <sub>2</sub> O (kt)
Open Pit			
Grants			
Proved	1.8	1.5%	26.4
Probable	0.3	1.4%	4.7
Total	2.1	1.4%	31.0
Hang Gong			
Proved	0.0	0.0%	0.0
Probable	1.1	1.2%	13.3
Total	1.1	1.2%	13.3
Total - Open Pit			
Proved	1.8	1.5%	26.4
Probable	1.4	1.3%	17.9
Total	3.2	1.4%	44.3

Underground			
Grants			
Proved	0.0	1.0%	0.2
Probable	0.2	1.5%	3.4
Total	0.3	1.4%	3.6
BP33			
Proved	1.3	1.4%	18.4
Probable	1.0	1.4%	13.8
Total	2.3	1.4%	32.2
Carlton			
Proved	0.6	1.2%	7.1
Probable	1.0	1.0%	10.7
Total	1.6	1.1%	17.8
Total - Underground			
Proved	1.9	1.3%	25.7
Probable	2.3	1.2%	27.8
Total	4.2	1.3%	53.6

Total – All Mining Methods			
Proved	3.8	1.4%	52.1
Probable	3.7	1.2%	45.8
Total	7.4	1.3%	97.9

Note: Totals within this table may have been adjusted slightly to allow for rounding.

In addition to the Ore Reserves listed above the Scoping Study includes 2.03 Mt at 1.2 % Li<sub>2</sub>O of Inferred material from the underground mines and 0.2 Mt at 1.2 % Li<sub>2</sub>O Inferred material from the open cut. Additional 0.13 Mt at 2.0 % Li<sub>2</sub>O Measured and Indicated material became economical from the underground mines with the addition of Inferred material.



Table 2 - Table of Mineral Resource included in the Study Mine Plan

Open Cut	Mt	Li <sub>2</sub> O (%)	Contained Li <sub>2</sub> O (kt)
Hang Gong	0.2	1.2	1.9
Total	0.2	1.2	1.9
Underground	Mt	Li <sub>2</sub> O (%)	Contained Li <sub>2</sub> O (kt)
Grants	0.3	1.3	4.1
BP33	0.6	1.4	8.3
Carlton	1.2	1.2	14.6
Total	2.2	1.3	27.0
Total – All Methods	2.4	1.2	28.9

Note: Totals within this table may have been adjusted slightly to allow for rounding.



## 3. Mining

### **Grants Open Pit**

There is no change to the Grants Open Pit compared with the DFS.

### Hang Gong Open Pit

The Hang Gong pit design for the Scoping Study was completed using the same design parameters as the DFS. The pit will be mined as a single phase. The contrast between the Ore Reserve pit design and the Scoping Study design for Hang Gong is shown in Figure 1.

Hang Gong has a schedule total of 1.25Mt of which 79% is Indicated Mineral Resource and 21% is Inferred Mineral Resource. The Inferred material is closer to surface and to the north.

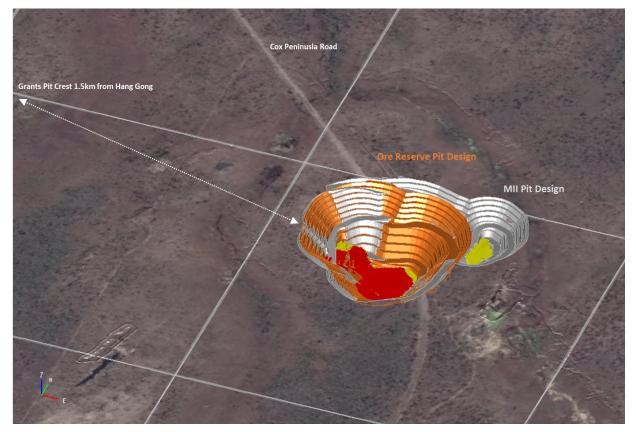


Figure 1 - Hang Gong Pit Design with Ore Reserves (Red) and Scoping design (MII) targeting the Inferred Mineral Resources (Yellow)

The Hang Gong Resource has potential to add additional shallow and deeper tonnes, so the Hang Gong Scoping Study design illustrates potential for the Hang Gong reserve to be improved upon. Future work will examine the Inferred material closer to surface to determine if improvements in strip ratio can be realised.

### **Grants Underground**

The Grants underground Scoping Study expanded on the DFS design using the same mining methods and assumptions. The expansion of the up hole retreat mining method into the adjoining Inferred areas is best illustrated by referring to Figure 2.



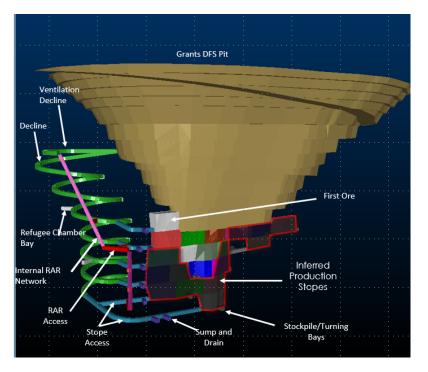


Figure 2 - Grants Underground Design (LOM)

The geotechnical assessment study conducted by SRK Consulting (Australasia) Pty Ltd (SRK) has assessed the ground conditions and recommended stoping dimensions for Grants underground with ground support in the form cable bolts. The Grants underground is mined without leaving stability rock pillars and is planned to break into the bottom of the open pit. The geotechnical assessment of the ground conditions and proposed mine design at Grants underground is to be further assessed.

Mining from Grants underground will be done using underground production loaders. The up hole retreat mining method selected requires remote loaders as it retreats along the ore drive. Material is to be stockpiled on the production level or loaded directly into underground mining trucks with a 45 t capacity. The haulage path will consist of the stope access development on the production level, the Grants decline, the Grants open pit haul road to the Grants processing facility. It is assumed that a contract mining company will be used, and their equipment hire fleet would be utilised. This has been included into the unit production and development mining costs.

Multiple experienced mining contractors were engaged by Core to provide a quotation on the mining of Grants underground deposit. It is expected that Core will award the contract to one of these experienced contractors. The majority of development and production costs were derived from the quotations. The Capital Costs for the Grants underground has been split into surface infrastructure, miscellaneous underground mining equipment, underground infrastructure and underground fixed equipment. The capital costs included in the study are derived from a quotation from a mining contractor, other suppliers and current project costs. Mining costs were benchmarked against similar projects. Mining costs are to a Scoping Study level. Costs have been calculated for a 0.5 Mtpa mining rate for Grants underground.

### **BP33 Underground**

The BP33 deposit is located approximately 6 km south of the proposed Grants open pit. Access to the BP33 underground deposit is via a 340 m decline from the surface box-cut to a decline connecting the lower levels (shown in Figure 3). BP33 is ventilated via dedicated raise bored RAR to surface. An internal drill and blasted RAR network will provide airflow to the production areas.



The mining method selected for the BP33 Inferred material is the same as that used for the DFS. Figure 10 below illustrates the how the Inferred material is incorporated into this Scoping Study design and extends upon the DFS design.

The BP33 Resource remains open at depth and along strike to the south and will be a focus of Core's Resource expansion drilling in 2021.

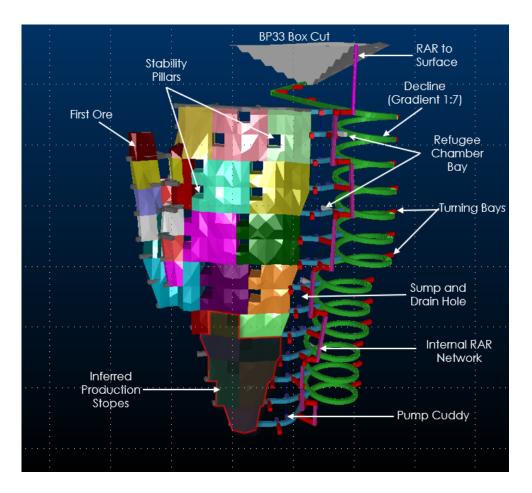


Figure 3 - BP33 Underground Design (LOM)

The SRK report has assessed the ground conditions and stoping dimensions for BP33 with ground support in the form of in-stope pillars and cable bolts. The recommended pillar dimensions are 15 m x 15 m. The square shape provides a greater load-bearing capacity than rectangular pillars.

Mining from BP33 will be done using underground production loaders. Given the sublevel retreat mining method majority of this will be done using remote loaders. It has been assumed that the same mining contractor would carry out mining at all the deposits. The costs for BP33 were prepared in the same way as for Grants underground. Material is to be stockpiled on the production level or loaded directly into underground mining trucks with a 45 t capacity.

The haulage path will consist of the stope access development on the production level, the BP33 decline, and haul road (6 km) to the Grants Processing facility.

It is assumed that a contract mining company will be used, and their equipment hire fleet would be utilised, this has been included into the unit production and development mining costs.

Multiple experienced mining contractors were engaged by Core to provide a quotation on the mining of BP33 deposit. It is expected that Core will award the contract to one of these



experienced contractors. The majority of development and production costs were derived from the quotation.

The Capital Costs for the BP33 underground has been split into surface infrastructure, miscellaneous underground mining equipment, underground infrastructure and underground fixed equipment. The capital costs included in the study are derived from a quotation from a mining contractor, other suppliers and current project costs. Mining costs were benchmarked against similar projects. Mining costs are to a Scoping Study level. Costs have been calculated for a 1.0 Mtpa mining rate for BP33.

### **Carlton Underground**

The Carlton deposit is south of the planned Grants open pit, access to the Carlton underground deposit is via a portal in the Grants open pit and a 1,200 m decline (shown in Figure 4). The 6.0 m x 6.0 m decline will also act as the primary ventilation intake into the mine with the exhaust to surface via a return a raise bored Return Air Raise (RAR).

The mining method selected for the Inferred areas of Carlton deposit is sublevel open stope mining. The Scoping Study design makes the same assumptions as the DFS. Figure 4 below illustrates the Interaction between the Reserve design and the Scoping Study design.

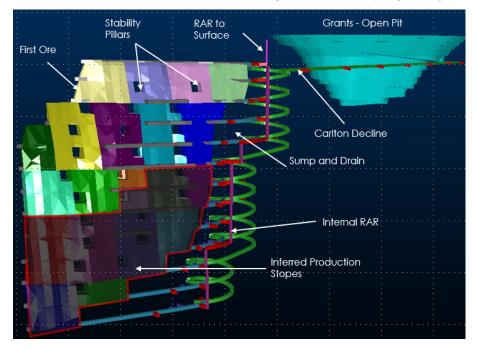


Figure 4 - BP33 Underground Design (LOM)

The Carlton Resource remains open at depth and along strike to the south and will be a focus of Core's Resource expansion drilling in 2021.

The Underground Geotechnical Study for Carlton Deposit (SRK Report) conducted by SRK has assessed the ground conditions and recommended stoping dimensions for Carlton (with ground support in the form of in-stope pillars and cable bolts).

SRK calculated a pillar factor of safety from modelled pillar stresses and pillar strengths. The recommended pillar dimensions are 15 m x 15 m. The square shape provides a greater load-bearing capacity than rectangular pillars.

The top of fresh rock is typically ~60 m below ground level. In the stability analysis the crown pillars are considered stable. Additional development will be required to undercut crown pillars to install cable bolts and shape the top of the stoping areas. This will assist in forming a stope void that will minimise the potential to induce crown failure or subsidence as stoping progresses.



Mining from Carlton will be done using underground production loaders. The sublevel open stoping method selected requires remote loaders as it retreats along the ore drive. Material is to be stockpiled on the production level or loaded directly into underground mining trucks with a 45 t capacity. The haulage path will consist of the stope access development on the production level, the Carlton decline, the Grants open pit haul road to the Grants Processing facility.

It is assumed that a contract mining company will be used, and their equipment hire fleet would be utilised, this has been included into the unit production and development mining costs.

Multiple experienced mining contractors were engaged by Core to provide a quotation on the mining of Grants underground and BP33 deposit. It is expected that Core will award the contract to one of these experienced contractors. The majority of development and production costs were derived from the quotation. BP33 has similar ground conditions the same mining method. The development and production unit costs for Carlton are assumed to be the same as BP33.

The Capital Costs for the Carlton underground has been split into surface infrastructure, miscellaneous underground mining equipment, underground infrastructure and underground fixed equipment. The capital costs included in the study are derived from a quotation from a mining contractor, other suppliers and current project costs. Mining costs were benchmarked against similar projects. Mining costs are to a Scoping Study level. Costs have been calculated for a 1.0 Mtpa mining rate for Carlton.



## 4. Scheduling

The Reserve LOM Schedule is contained in the table below.

The ten (10) year Life of Mine (LOM) is reflected in the Mining and Concentrate Physicals tables below.





Finniss Scoping Study		Total	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Mining Physicals			0	1	2	3	4	5	6	7	8	9	10
			2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Open Pit													-
Total Mined	bcm	30,525,492		6,686,103	6,157,652	1,049,988	-	-	_	5,173,878	7,933,277	3,079,373	445,221
Waste Mined	bcm	29,271,391		6,499,191	5,844,268	759,850	-	-	_	5,173,878	7,893,191	2,847,707	253,306
Ore Mined	bcm	1,254,101		186,912	313,384	290,138	-	-	-	-	40,086	231,666	191,915
Strip ratio	w:o	23.3											
Ore Mined	t's	3,398,253		507,070	849,274	786,905	_	-	_	-	108,348	627,142	519,514
Ore Grade	Li <sub>2</sub> 0%	1.35%		1.48%	1.40%	1.45%	0.00%	0.00%	0.00%	0.00%	1.07%	1.22%	1.23%
Underground													
Boxcut	kt	2,000			2,000								
Development													
Total Development	m	22,144			889	4,811	3,962	1,662	5,076	2,151	3,243	351	-
Total Development Waste	t's	1,256,902			85,232	314,192	207,260	53,424	265,671	120,426	192,519	18,179	-
Total Development Ore	t's	378,238			_	30,529	126,429	53,529	75,703	37,857	46,680	7,512	-
Development Ore Grade	Li <sub>2</sub> 0%	1.33%			0.00%	1.38%	1.39%	1.52%	1.26%	1.02%	1.26%	1.45%	0.00%
Stope Production													
TOTAL Ore Production	t's	5,990,979			_	263,335	925,585	1,086,471	1,055,386	937,350	922,685	800,166	-
Production Ore Grade	Li <sub>2</sub> 0%	1.26%			0.00%	1.35%	1.28%	1.43%	1.42%	1.10%	1.08%	1.17%	0.00%
Summary													
Total Ore Mined	t's	9,767,470		507,070	849,274	1,080,769	1,052,014	1,140,000	1,131,090	975,207	1,077,713	1,434,820	519,514
Ore Grade	Li <sub>2</sub> 0%	1.30%		1.48%	1.40%	1.42%	1.29%	1.43%	1.41%	1.10%	1.09%	1.19%	1.23%



Finniss Scoping Study		Total	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
Concentrate Physicals			0						6		8	9	10
			2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Gravity Concentrate Product	ion												
Crushing & Screening													
Mine Ore Crush & Screen	t's	9,767,470		85,000	1,080,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,070,000	1,100,000	932,470
Grade	Li <sub>2</sub> 0%	1.30%		1.47%	1.43%	1.42%	1.30%	1.41%	1.44%	1.14%	1.07%	1.18%	1.23%
Concentrate Production													
Recovery	%	71.70%		71.70%	71.70%	71.70%	71.70%	71.70%	71.70%	71.70%	71.70%	71.70%	71.70%
DMS Output	t's	1,563,864		15,514	190,486	193,686	177,232	191,889	195,935	154,622	142,177	160,963	141,361
Grade	Li <sub>2</sub> 0%	5.80%		5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%
Concentrate Transport													
Concentrate Mine to Port													
Product Hauled	t's	1,563,864		12,500	182,500	192,500	187,500	190,000	192,500	161,500	141,000	161,000	142,864
Hauled Grade	Li <sub>2</sub> 0%	5.80%		5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%
Concentrate Port to Market													
Concentrate Shipped	t's	1,563,864		12,500	182,500	192,500	187,500	190,000	192,500	161,500	141,000	161,000	142,864
Shipped Grade	Li <sub>2</sub> 0%	5.80%		5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%



## 5. Capital Cost Estimation5.1 Contingency Framework

Contingency has been applied across the cost activity and areas using the following framework:

Table 3 - Contingency	Framework
-----------------------	-----------

	Capital Activity / Costs	Operating Activity / Costs
Infrastructure	Between 10% & 12.5% applied to Direct costs	Nil
Open Pit	2.5% of Load & Haul costs allocated to dayworks	2.5% of Load & Haul costs allocated to dayworks
Underground	7.5% applied to Capital Costs 5% Unplanned Work Factor applied to Development Unit Costs	5% Unplanned Work Factor applied to Production Unit Costs

### **Initial Capital Cost**

The initial capital costs to establish the mine site, commence construction and pre-strip grants open pit to first ore. Total initial capital is \$88.9 million and is the same as diclosed in the DFS. (Refer Stage 1 DFS and Updated Ore Reserves - ASX:CXO 26/07/21).

### **Total Mine Development and Net Closure Capital Cost**

Production capital represents total capital costs excluding initial capital and reflects mine development, sustaining capital and decommission and demobilisation costs and establishment of site infrastructure. Production capital (excluding initial capital cost) is summarised in the table below:

### Table 4 - Production capital cost summary

Production Capital Expenditure	Sustaining Capital	Non-Sustaining Capital	Total Production Capital
Mine Development Costs			
Grants Underground	\$17.0m	\$1.8m	\$18.8m
BP33 Underground	\$35.1m	\$11.8m	\$46.9m
Carlton Underground	\$50.0m	\$5.2m	\$55.2m
Hang Gong Open Pit	-	\$71.0m	\$71.0m
Total Mine Development Costs	\$102.1m	\$89.8m	\$191.9m
Other Capital			
Other Capital	\$2.1m	-	\$2.1m
Closure, Decommissioning & Plant Disposal			
Closure, Clean-up & Decommissioning	-	\$8.0m	\$8.0m
Capital Recovery / Equipment Disposal	-	(\$11.5m)	(\$11.5m)
Total Closure, Decommissioning & Plant Disposal	-	(\$3.5m)	(\$3.5m)
Total Production Capital Cost	\$104.3m	\$86.2m	\$190.5m



Total production capital costs are derived from multiple open pit mine contractor Lucas Total Contract Solutions, independent underground mine contractors, EPC estimates from third party contractor Primero.

Production capital is the sum of Sustaining and Non-Sustaining Capital Costs and excludes Initial Capital.

Non-sustaining capital is defined as mine development capital expenditure incurred prior to the commencement of production at a mine. Sustaining capital is defined as mine development capital expenditure incurred on the commencement of and during production of a mine.



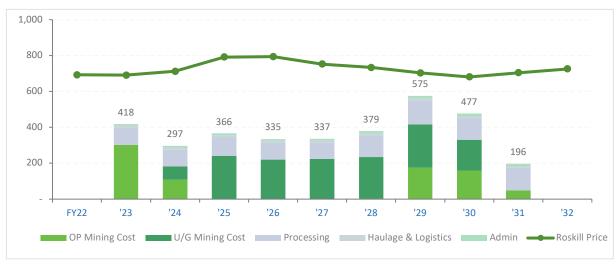
## 6. Operating Cost Estimation

The Scoping Study operating costs for a DMS operation from commencement of commercial production and using a 0.70 USD:AUD exchange rate are detailed below.

LOM Average Unit Operating Costs	US\$/t1
OP Mining Costs	86
UG Mining Costs	157
Processing	107
Haulage & Logistics	12
Site General & Administration	11
C1 Operating Costs <sup>2</sup>	372
Royalties	35
Sustaining & UG Development Capex	47
All-in Sustaining Costs (FOB)3	454

Table 5 - LOM Average Unit Operating Costs

This translates into strong operating margins throughout the Project's life. Using the life of mine average Roskill Price of US\$731/t results in a strong margin of greater than US\$250/t than the projects AISC highlighted by this Study.



### C1 Operating Cost (US\$/t) vs. Roskill Price (US\$/t)

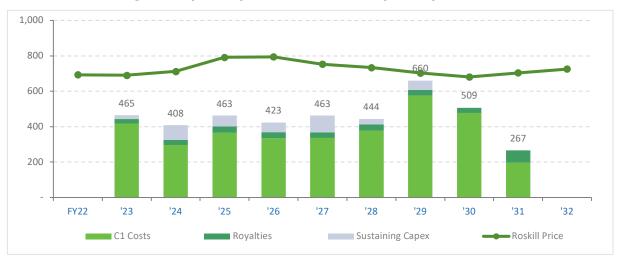
#### Figure 5 - C1 operating cost relative to April 2021 Roskill Price Forecast

The Roskill Price (FOB) is derived from Roskill April 2021 CIF China price forecast, adjusted for sea freight of US\$20/t concentrate and a pro-rata grade adjustment for 5.8% Li<sub>2</sub>O grade.

C1 Operating Costs are defined as direct cash operating costs of production FOB. Direct cash operating costs include mining, processing, transport, and general and administration costs.

C1 Operating Costs exclude royalties and sustaining capital costs and are calculated and reported from commencement of commercial production.





### All-In Sustaining Cost (US\$/t) vs. Roskill Price (US\$/t)

Figure 6 - AISC relative to April 2021 Roskill Price Forecast

All-In Sustaining Costs (AISC) are defined as CI Operating Costs plus production royalties, government royalties and sustaining capital. AISC are calculated and reported from commencement of commercial production. AISC exclude Non-Sustaining Capital expenditure.

Operating cost estimates are derived from multiple contractor sources including Lucas Total Contract Solutions for open pit mining contractor costs, tenders obtained from underground mining contractors for underground mining costs, EPC and O&M engineering firm Primero for EPC construction and O&M process operating costs, Qube Bulk for haulage costs and from Darwin Port for handling cost estimates.

### Royalties and Income Tax

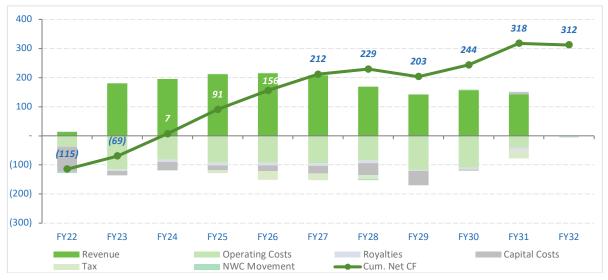
The royalties and income tax assumptions remain the same as those disclosed in the DFS. (Refer Stage 1 DFS and Updated Ore Reserves - ASX:CXO 26/07/21).



### **Operating Margins and Cash Flow**

The Scoping Study illustrates that the Finniss Lithium Project has strong operating margins from commencement of commercial production using a 0.70 USD:AUD exchange rate and healthy cash flows as detailed below.

Metric	Unit Costs	
	C1 Costs	AISC
	U\$/t conc.	U\$/t conc.
Total Unit Operating Costs	\$372	\$454
Average Spodumene Concentrate Price, FOB	\$731	\$731
Total Operating Margin (%)	96%	61%



This is also reflected in the annual cash flow as detailed in the figure below.

Figure 7 - SS Post-Tax Cashflows



## 7. Project Valuation

Core used the abovementioned April 2021 Roskill deck from Calendar Years 2021 to 2031 to estimate revenues in the Study. These prices were disclosed as Cost Insurance and Freight (CIF) prices and were adjusted to Free on Board (FOB) prices in the Scoping Study using a long-term average freight rate of US\$20/t representing estimates shipping cost from Darwin Port to customers in Asia. The April 2021 Roskill price deck (CIF) China is shown in the figure below and are compared to high, low and average June-2021 broker CIF forecasts which were sourced from broker research reports.



### 6% Spodumene Price Outlook (US\$/t, CIF China)

Figure 8 - Roskill 6% Spodumene Price Outlook price analysis (US\$/t, CIF China)



A summary of the Finniss Lithium Project as presented in the Scoping Study is best summarised below.

	Units	Scoping Study June 2021
End of Mine Processing Life	Date	May-31
Mine Life	Years	10
Throughput	Mtpa	1.0 - 1.1
Ore Grade	%	1.30
Recovery	%	71.7
SC 5.8% Production	Kt	1,564
Upfront Capital Cost	A\$m	89
LOM Sustaining Capital	A\$m	104
LOM Non-Sustaining Capital (excl. Closure Decommissioning and Plant Disposal)	A\$m	90
SC 6.0% Price (LOM)1	US\$/t FOB	731
LOM Revenue	A\$m	1,634
LOM Avg. Annual EBITDA (post commercial production)	A\$m	72
LOM Avg. Annual FCF (post commercial production)	A\$m	43
Pre-Tax NPV	A\$m	259
Pre-Tax IRR	%	55.7
Post-Tax NPV	A\$m	193
Post-Tax IRR	%	49.3
Payback from first sale	Years	2.0

### Table 6 - Key assumptions table

1. Commodity Pricing assumptions are derived from Roskill April 2021 forecast and represent an average received price over the LOM. Assumptions include sea freight of US\$20/t concentrate and a pro-rata grade adjustment for 5.8% Li<sub>2</sub>O grade.



## 8. Cost & Revenue Sensitivity

Sensitivities are applied to key project estimates and assumptions. Favourable and unfavourable movements relative to post-tax NPV are illustrated in the chart below.







# 9. Financial Evaluation9.1 Financial Analysis

The cash flow of the project using latest Roskill price forecasts adjusted for 5.8% spodumene concentrate grade and using a 8% discount rate shows that the Finniss Lithium Project has a Post-Tax NPV and IRR of A\$193 million and 49.3% respectively for the Extension Scoping Study Case.

### Price Sensitivity, Net Cashflows and NPV

The sensitivity analysis of the NPV to key variables, including spodumene concentrate price, US\$ exchange rate and recoveries, indicates that the Finniss Lithium Project is robust. The Finniss Lithium Project is most sensitive to the AUD:USD exchange rate, with spodumene concentrate price and costs with recoveries and grade being the next most significant variables.

Mine plans can be optimised in response to a change in commodity prices, based on the direction of the change in commodity prices. The sensitivity analysis looked at changes of between +10/-10 percent for revenue and +10/-10 percent for operating and capital costs, +5/-5 cents for FX, +2/-2 percent for discount rate and +5/-5 percent for lithium recoveries. The Finniss Lithium Project did not present one scenario which had neutral or negative NPV at these combinations.

The net cashflows from the Finniss Lithium Project have continued to improve with each feasibility study which is produced by the Company and the latest Scoping Study update is no exception. This is mainly driven by the increase in volume mined due to a much greater mine life and higher concentrate grades offset in part by production capital requirements required to access the certain orebodies.

Total estimated initial capital expenditure reflects both the EPC price estimate from Primero, pre-strip mining activity based on rates provided by Lucas Total Contract Solutions and amendments and improvements to the plant layout which ultimately improves recovery efficiency. The estimated total operating expenditure is higher earlier in the mine life due to a larger starter open pit (Grants) resulting in additional pre-strip and due to greater life of mine operating costs. From the commencement of commercial production, CI Operating Costs remain relatively consistent throughout the life of mine and AISC increase in periods where new mines are being developed. Production Capital Expenditure from mine developments following the Grants Open Pit including Grants Underground, BP33 Underground, Carlton Underground and Hang Gong Open Pit are expected to be funded out of project cash flows.

The Finniss Lithium Project Initial Capital Expenditure (\$88.9 million) includes the pre-strip of both the Grants Open Pit (\$33.9 million) and Production Capital Expenditure including to develop remaining prospects (\$190.5 million). The Finniss Lithium Project's operating margins for Cl Operating Costs and AISC are 96% and 61% respectively using Roskill April 2021, FOB price forecast average over the life of mine.

Assuming Roskill April 2021, FOB price forecasts, the payback period from shipment of the first concentrate is 25 months.

The Life of Mine C1 Operating Cost FOB (excluding pre-strip capital expenditure) is estimated to be US\$372/t of spodumene concentrate. The total royalties and Sustaining Capital Expenditure over the LOM from commencement of commercial production add US\$35/t and US\$47/t respectively which results in a LOM AISC estimate of US\$454/t.

The commodity price assumptions used in the financial valuations carried out during the Scoping Study are detailed in this report's Capital and Operating Cost section. The USD:AUD



exchange rate assumptions and sensitivity analysis have taken into account both fixed and spot exchange rates.

### **Funding Options**

Funding options available to the Company are the same as those disclosed in the DFS. (Refer Stage 1 DFS and Updated Ore Reserves - ASX:CXO 26/07/21).



## 10. Processing

The metallurgy and processing assumptions remain the same as the DFS. (Refer Stage 1 DFS and Updated Ore Reserves - ASX:CXO 26/07/21). There are reasonable expectations that the processing infrastructure described in the DFS will adequately service the additional two (2) years of mine potential identified in this study.

## **11. Infrastructure, Transport and Services**

The Infrastructure, Transport and Services assumptions remain the same as the DFS. (Refer Stage 1 DFS and Updated Ore Reserves - ASX:CXO 26/07/21). There are reasonable expectations that the infrastructure described in the DFS will adequately service the additional two (2) years of mine potential identified in this study.

## **12. Environment and Approvals Timeline**

The Environment and Approvals Timeline assumptions remain the same as the DFS. (Refer Stage 1 DFS and Updated Ore Reserves - ASX:CXO 26/07/21). There are reasonable expectations that the timelines and resources required to secure the Environmental and key mining approvals for the additional two (2) years of mine potential identified in this study will be available.



## 13. Scoping Study Update Contributors

Table 8 – Scoping Study Contributors

Consultant / Contributor	Component	Scope of Work	
Core / Primero	DFS Engineering	Overall DFS lead Process plant design Project infrastructure design Project layout Overall capital and operating cost estimates	
Dr Graeme McDonald	Geology and Resource	Resource estimation Ore grade variability modelling	
SRK	Mine Geotechnical Design	Geotechnical diamond core logging and testing Geotechnical pit wall stability modelling Pit wall design parameters Trafficability Haul ramp design	
Core / TME / Proactive Mining Solutions	Ore Reserve	Resource optimisation Final pit shell designs Ore Reserve estimation	
ТМЕ	Open Pit Mine Planning & Scheduling	Detail mine planning and scheduling Preliminary mining equipment selection Equipment productivity benchmarking	
TME	Open Pit Mining	Verification of mine planning and ore scheduling Detailed staged pit designs Detailed haul route designs Final equipment sizing and selection Mining equipment capital estimates Mining operating cost estimates Final overburden waste dump designs	
EcOz / Simon Fulton	Hydrogeology	Raw water borefield hydrogeological modelling Ground water resource estimation Pit dewatering hydrogeological model Pit dewatering re-injection hydrogeological model Re-injection borefield design	
Core	Pit Dewatering Design	Pit dewatering borefield design Pit dewatering capital and operating cost estimate	
GHD	Civil Geotechnical Design	Civil test pit logging and sample testing Burrow pit sampling and testing Civil pavement design for main access road	



		Civil pavement design for airstrip Civil foundation design for process plant
Cable Blu	Communication Infrastructure	Telecommunications design and engineering Telecommunications capital cost estimate Telecommunications operating cost estimate
Core Lithium Ltd	Power & Fuel Supply	Pre-qualification tender evaluation of power supply Commercial evaluation of natural gas and diesel fuel options
Roskill	Marketing	Lithium market study and forward pricing
Core / Azure	Economic Modelling	Development of project financial model Project economic evaluation
Trinol / Nagrom	Metallurgical Test work	HLS & DMS
GHD/Trilabs/Outotec	In-Pit Tailings Disposal	In-pit tailings stability testing In-pit tailings capacity In-pit tailings operating philosophy
OreWin Pty Ltd	Underground Mining	Mine Planning and Scheduling Underground Mining Capital Estimates Underground Mining Operating Cost Estimates





## **14. NEXT STEPS**

It is recommended that the work at Grants Underground, BP33, Carlton and Hang Gong deposits be further analysed in an Execution Plan. The Execution Plan should include:

### Geological

Additional drilling and geological analysis to convert Inferred material within Grants underground, BP33, Carlton and Hang Gong to Measured or Indicated.

Identifying Exploration targets within Carlton and BP33 that can be accounted for in underground designs.

### Geotechnical

Expand the geotechnical data collection and rock mass characterisation within the ore zones and immediate vicinity there-of.

Complete additional stress measurements to improve the profile of the site stress regime.

Identify potential geotechnical hazards and risk to the project.

Provide guidelines to develop a comprehensive Ground Control Management Plan (GCMP) with supporting procedures and ground support standards.

Provide ground support requirements as required for the execution phase.

Detail the extraction strategy of the underground ore zone.

### Ventilation

LOM ventilation modelling to accurately determine, airflow and potential cooling estimates.

Phasing of infrastructure.

Secondary ventilation details.

Ventilation strategy during development as well as basic engineering and selection of ventilation equipment to increase the accuracy and confidence of cost estimates.

Confirmation of project unknowns including likely contaminants from strata, diesel quality, ambient weather conditions, actual site VRT data and expected fissure water.

Basic engineering of primary fan station and equipment selection.

Detailed vendor budget estimates for input into detailed cost estimates.

Detailed heat analysis to establish the magnitude to accurately determine and confirm the cooling requirements.

### **Mine Design**

Include additional Geological, Geotechnical, Ventilation requirements into the mine design to an execution design level.

Increased level of detail in underground designs an execution design level.

Short term execution schedule.

### Production

Detailed production schedules integrating the production from each underground with the open pit.

Overall production capability.



### Costs

Further evaluation and quotes will be sourced in the Execution Phase.

Formal tender process initiated.

### Infrastructure

Efficiencies given the longer mine life will be examined.



This announcement has been approved for release by the Core Lithium Board.

### For further information please contact:

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## **Important and Cautionary Notes**

### **Cautionary Statement**

The 2021 DFS, the Open Pit Ore Reserve Estimate contained within it and this Extended Scoping Study considers the Mineral Resource Estimates released to the ASX on 15 June 2020 and the updated Grants Mineral Resource Estimate released on 26 July 2021 by Core Lithium. The Mineral Resource contains Measured, Indicated and Inferred Mineral Resources outlined above. There are sufficient Ore Reserves and Measured & Indicated Mineral Resources to complete the production schedule and achieve payback. There is a low level of geological confidence associated with the Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

For the Grants Open Pit the Inferred Mineral Resource is not the determining factor in determining the viability of the Finniss Project as the Inferred Mineral Resource represents only 4.4% of the production during the 18 month pay-back period in the Reserve Case. The DFS Reserve Case contains 14% Inferred material. The DFS does not rely upon additional Mineral Resources from the company's other prospects.

For the BP33 & Carlton Undergrounds only 0.15% and 0.22% respectively of the total production from Underground is based upon Inferred material at zero grade.

### **Competent Person Statements**

The Mineral Resources and Ore Reserves underpinning the Production Target have been prepared by competent persons in accordance with the requirements of the JORC code.

The information in this release that relates to the Estimation and Reporting of Mineral Resources has been compiled by Dr Graeme McDonald. Dr McDonald acts as an independent consultant to Core Lithium Limited. Dr McDonald is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience with the style of mineralisation, deposit type under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code). Dr McDonald consents to the inclusion in this report of the contained technical information relating to the Mineral Resource Estimation in the form and context in which it appears.

The information in this release that relates to the Estimation and Reporting of Open Pit Ore Reserves is based on, and fairly represents, information and supporting documents compiled by Mr Blair Duncan. Mr Duncan is currently the Chief Operating Officer for Core Lithium Limited. Mr Duncan is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience with the style of mineralisation, deposit type under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code). Mr Duncan consents to the inclusion in this report of the contained technical information relating to this Scoping Study in the form and context in which it appears.

The information in this release that relates to the Estimation and Reporting of Underground Ore Reserves is based on, and fairly represents, information and supporting documents compiled by Mr Curtis Smith employed as Principal Mining Engineer by OreWin Pty Ltd. and is a Member of the Australasian Institute of Mining and Metallurgy. Curtis Smith is a Competent Person as defined by the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves", having more than five years' experience that is relevant to the style of mineralisation and type of deposit and activity



described in the Scoping Study, Curtis Smith consents to the inclusion in the Public Report of the matters based on their information in the form and context in which it appears.

Core confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the Mineral Resource and Ore Reserve estimates (as applicable) in the announcements "Grants Lithium Resource Increased by 42% ahead of DFS" dated 22 October 2018, "Finniss Feasibility Study and Maiden Ore Reserve" dated 17 April 2019 and "Finniss Lithium Resource Increased by over 50%" dated 15 June 2020, continue to apply and have not materially changed. The Ore Reserves and Mineral Resources underpinning the production target have been prepared by a Competent Person in accordance with the requirements of the JORC code.

Core confirms that it is not aware of any new information or data that materially affects the Exploration Results included in this announcement as cross referenced in the body of this announcement.

### Forward-looking Statements

This release contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the pre-feasibility and feasibility studies, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, Mineral Resources, results of exploration and relations expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this news release are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of scandium and other metals; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information.

The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law. Statements regarding plans with respect to the Company's mineral properties may contain forward-looking statements in relation to future matters that can be only made where the Company has a reasonable basis for making those statements.

### Currency

Unless otherwise stated, all cashflows are in Australian dollars, are undiscounted and are in real terms (not subject to inflation/escalation factors), and all years are calendar years.



### Accuracy

The Study has been prepared to an overall level of accuracy of approximately -30% to +30%. This judgement is made following consideration of the basis studies and the features outlined in the Cost Estimation Handbook Second Edition Monograph 27 AusIMM, The Minerals Institute.



### JORC Code, 2012 Edition – Table 1 Report

Section 1,2 & 3 for BP33, Carlton and Hang Gong refer to ASX release dated 15 June 2020. This section 1, 2 & 3 applies to the updated Grants Mineral Resource Estimate only.

### Section 1 Sampling Techniques and Data (Grants)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	<ul> <li>Drilling geology, assays and resource estimation results reported herein relate to Reverse Circulation (RC) and Diamond Drill Hole (DDH) drilling at the Grants Deposit on ML31726.</li> <li>Core's RC drill spoils were collected into two sub-samples:</li> <li>1 metre split sample, homogenised and split at the cyclone into 12x18 inch calico bags. Weighing 2-5 kg, or 15% of the original sample.</li> <li>A 20-40 kg primary sample is also collected in 600x900mm green bags and retained until assays have been returned and deemed reliable for reporting purposes.</li> <li>RC sampling of pegmatite for assaying is done on a 1 metre basis. Im-sampling continued into the barren wall-zone of the pegmatite and then a 3m composite was collected from the immediately surrounding barren phyllite host rock.</li> <li>Drill core was collected directly into trays, marked up by metre marks and secured as the drilling progressed. Geological logging and sample interval selection took place soon after.</li> <li>DDH Core was transported to a local core preparation facility and typically cut into half longitudinally along a consistent line between 0.3m and 1m in length, ensuring no bias in the cutting plane. A half was then collected on a metre basis (where possible), bagged and sent to the North Australian Laboratory in Pine Creek, NT, for analysis. In some instances, half core was then cut into two further segments. With quarter core being sent for analysis and half core provided to Nagrom laboratory in Perth for metallurgical testwork. The remaining half or quarter core is retained at Core's storage shed in Berry Springs.</li> </ul>

		DDH sampling of pegmatite for assays is done over the sub- 1m intervals described above. 1m-sampling continued into the barren phyllite host rock.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Drilling technique used by Core and reported herein comprises:</li> <li>Reverse circulation (RC) and diamond (DDH) drilling undertaken by various operators.</li> <li>RC drilling typically used 4 and <sup>3</sup>/<sub>4</sub> inch or 5 and <sup>1</sup>/<sub>4</sub> inch hammers with 5 to 5.5 inch face sampling bits. With significant compressor/booster/auxiliary air combinations capable of drilling to the depths required.</li> <li>Diamond drilling was either drilled from surface or utilised Mud Rotary or RC pre collars.</li> <li>A large majority of the core drilled was HQ (triple tube), with very minor PQ, using a wireline setup. Drilling muds or water were used as required.</li> <li>Oriented core was obtained for DDHs.</li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	During RC drilling, the rig geologist routinely notes and documented the sample recovery (0-100%) and quality (Wet, Moist, Dry) for each metre. Sample recovery is generally >95% and samples were dry apart from certain drill holes, and then usually only the first sample after a rod change. Evidence for contamination is monitored regularly. If evidence of contamination was noted in the calico sub-sample, the procedure was to visually compare to the green RC bag and take actions to correct and collect a representative sample. The rigs splitter is emptied between 1m samples. The set-up of the cyclone varied between rigs, but a gate mechanism was used to prevent inter-mingling between metre intervals. The cyclone and splitter were also regularly cleaned by opening the doors, visually checking, and if build-up of material is noted, the equipment cleaned with either compressed air or high-pressure water. Drill collars are sealed to prevent sample loss and holes are normally drilled dry to prevent poor recoveries and



		<ul> <li>contamination caused by water ingress. Wet intervals are noted in case of unusual results.</li> <li>No material bias has been recognised.</li> <li>Wet and moist samples readily reflect the grade of the drilled interval, as much as the dry sample.</li> <li>DDH core recoveries were measured using conventional procedures utilising the driller's markers and estimates of core loss, followed by mark up and measuring of recovered core by the geologist or geotechnician.</li> <li>DDH recovery was close to 100% and was reconciled by the weights dispatched to Nagrom for metallurgical testwork for the metres drilled.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Standard sample logging procedures are utilised by Core, including logging codes for lithology, minerals, weathering etc.</li> <li>Entire drilled interval of RC and DDH is logged.</li> <li>A chip tray for the entire RC hole is completed. A sub-sample is sieved from the large RC bags into chip trays over the pegmatite interval to assist in geological logging.</li> <li>Geology of the RC drill chips were logged on a metre basis with attention to main rock forming minerals within the pegmatite intersections.</li> <li>Geology of the drill core is logged on a geological basis with attention to main rock forming minerals and textures within the pegmatite intersections.</li> <li>Pegmatite sections are also checked under a single-beam UV light for spodumene identification on an ad hoc basis.</li> <li>Estimation of mineral modal composition, including spodumene, is done visually. This is then correlated to assay data when available.</li> <li>Core trays and RC chip trays are photographed and stored on the Core server.</li> <li>Geotechnical logging has been carried out on oriented DDH drill holes.</li> </ul>



Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	RC samples have been collected on a 1m-basis utilising the cone splitter mounted under the drill rig's cyclone or on a
	If non-core, whether riffled, tube sampled, rotary split,	trailer (rotary type).
		Where the sample was too wet for the cone splitter to operate effectively, 1m samples were collected from the 1m bulk bags
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	using a spear. This was rare.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	The type of sub-sampling technique and the quality of the sub-sample was recorded for each metre. The quality of the samples was assessed prior to their inclusion in calculated
	Measures taken to ensure that the sampling is	interval averages.
	representative of the in-situ material collected, including for instance results for field duplicate/second- half sampling.	Half or quarter drill core sample intervals were constrained by geology, alteration or structural boundaries, intervals generally varied between a minimum of 0.3 m up to a maximum of 1 m.
	Whether sample sizes are appropriate to the grain size	The core is cut along a regular Ori line to ensure no sampling bias.
		A field duplicate sample regime is used to monitor sampling methodology and homogeneity of RC drilling. The typical procedure is to collect Duplicates via a spear of the green RC bag. Trying to split the 2-3kg calico bag into an Original and a Duplicate has inherent dangers, least of all reducing the sample mass. However, comparing a rig split sample with a spear sample also has some element of incompatibility. The expectation would be a high degree of variability in the spear sample, because of the heterogenous and stratified RC bag, but overall it should statistically match the split original sample.
		Despite the duplicate sample methodology and heterogeneous nature of the pegmatite, results of duplicate analyses show an acceptable degree of correlation.
		A series of duplicates were also selected to test on a "like for like" basis. A Spear sample was used for the Original and the Duplicate, to test for heterogeneity in the RC bag. Data shows a remarkably good correlation.
		Given the pegmatite minerals, including the spodumene, are very coarse grained, there is expected to be an issue of heterogeneity. This is why CXO have drilled using HQ diameter. Assaying of coarse rejects as part of the Umpire process in 2017 showed that there is good correlation between



		the original and duplicate samples at that scale. However, there is assay variability from one metre to the next that reflects the heterogeneity. This is evident when comparing assays profiles twinned DDH and RC holes. RC tend to exhibit a flatter more consistent trend. This is because RC samples a larger volume of material for each metre and flattens out the fluctuations.
		Generally half and sometimes quarter core is cut as described above, bagged and sent to the laboratory for analysis. The heterogeneity of pegmatite core material means it is not suitable for "second-half" or "second-quarter" duplicate analysis.
		Sample prep occurs at North Australian Laboratories ("NAL"), Pine Creek, NT.
		DDH samples are crushed to a nominal size to fit into mills, approximately -2mm. RC samples do not require any crushing, as they are largely pulp already.
		A 1-2 kg riffle-split of DDH crushed material and RC Samples are then prepared by pulverising to 95% passing -100 um.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the	Routine sample analysis occurs at North Australian Laboratories (NAL), Pine Creek, Northern Territory.
	technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their	A 0.3 g sub-sample of the pulp is digested in a standard 4 acid mixture and analysed via ICP-MS and ICP-OES methods for the following elements: Li, Cs, Rb, Sr, Nb, Sn, Ta, U, As, K, P and Fe. The lower and upper detection range for Li by this method are 1 ppm and 5000 ppm respectively.
	derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	In the 2016-2017 program, all samples were also analysed via a fusion method - a 0.3 g sub-sample is fused with a Sodium Peroxide Fusion flux and then digested in 10% hydrochloric acid. ICP-OES is used for analysis of the following elements: Li, P and Fe. The lower and upper detection range for Li by this method are 10 ppm and 20,000 ppm respectively. Checks of this data suggested an excellent correlation exists, so in 2018 a 3000 ppm Li trigger was set to process that sample via a fusion method.
		Selected drill core samples were also run for the following additional elements to provide a broader suite: Al, Ca, Mg, Mn, Si, LOI, SG (immersion), SG (pycnometer) and various trace



		elements. Na was also analysed using a 4 acid digest and ICP- OES method.
		NAL utilise high standard internal quality control measures including a regime of 1 in 8 control subsamples, the use of Certified Lithium Standards and duplicate/repeat sample analysis.
		QAQC of Drilling data
		CXO-implemented quality control procedures include:
		One in twenty certified Lithium ore standards are used for the drilling.
		One in twenty duplicates are used for this drilling (RC only).
		Blanks inserted at a rate of roughly one in twenty.
		Core routinely uses up to nine different standards ranging between 1,700 ppm and 10,300 ppm Li ppm. This covers the range of expected Li values in the mineralised pegmatite.
		Typically, standards report back with an excellent correlation. Overall, the standards average well within 2 Std Dev of the expected value for Li.
		There is some evidence that standards with high Li values are being under-reported by up to 3%.
		A quartz sand blank used by Core displays a very low Li content with assays typically <40 ppm (<0.01% Li <sub>2</sub> O). This value is well below the effective cut-off grade used for the significant intercepts or Mineral Resource Estimate reporting.
		Duplicates were not collected for the DDH core drilling, as discussed above.
		Duplicates for RC samples displayed an excellent correlation.
		External laboratory checks have been undertaken and results indicate a high degree of correlation (NAL vs Nagrom), refer to next section.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Senior technical personnel have visually inspected and verified the significant drill intersections.
	The use of twinned holes.	

	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All field data is entered into an Ocris or Excel logging system (supported by look-up/validation tables) at site and imported into the centralised CXO Access database.
	Discuss any adjustment to assay data.	Hard copies of logs and sampling data are stored in the local office and electronic data is stored on the CXO server.
		Metallic Lithium was multiplied by a conversion factor of 2.15283/10000 to report Li ppm as $Li_2O\%$ .
		External laboratory check samples ("umpire checks") have routinely been submitted to an independent laboratory (Nagrom in Perth) for final verification of results. This serves to check laboratory Li assay repeatability and to investigate the Fe contamination caused by milling equipment at NAL. The material used is the residue of coarse primary crushed archive material from original RC samples or ¼ core provided in-tact or as coarse rejects from NAL.
		From this "umpire" exercise, the Lithium check values correlate well with the original NAL values, but are by average 3-6% higher at Nagrom. It could be argued that they are under-reported at NAL.
		Five diamond core holes were drilled as twins to RC holes and used to check the difference between RC and DDH assays across a similar part of the mineralised pegmatite. The data indicate variability on a metre-by-metre basis, related to the heterogeneity of the pegmatite, but overall, the intercepts are proportionate.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Coordinate information for the Grants drillholes was collected by Differential GPS (DGPS), by Land Surveys Australia Pty Ltd. This data is accurate to 10 cm in all three dimensions. These collar RLs were verified against CXO's DTM.
	Specification of the grid system used. Quality and adequacy of topographic control.	The grid system used by Core is MGA_GDA94, zone 52 for easting, northing and RL.
		RC and DDH hole traces were surveyed by multishot north seeking gyro tool operated by the drillers.
		Drill hole deviation has been minor and predictable in the most part. In any case, the gyro down hole survey has accurately recorded the drill traces and any deviation from the



Data spacing and distribution	Data spacing for reporting of Exploration Results.	planned program can be accommodated in a 3D GIS environment. A QA-QC procedure is applied to the data. Drill collars are spaced approximately 25m apart along the
	<ul> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	north trending pegmatite body at Grants. This data will be used to support a Mineral Resource estimate. Refer to figures in report. Sample compositing reported here are calculated length weighted averages of the assays. Length weighted averages are acceptable method because the density of the rock (pegmatite) is constant.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drilling is oriented approximately perpendicular to the interpreted strike of mineralization (pegmatite body) as mapped or predicted by the geological model. Because of the dip of the holes, drill intersections are apparent thickness and overall geological context is needed to estimate true thickness. True thickness is estimated to be in the range of 60-70% of drilled width. No sampling bias is believed to have been introduced by the drilling orientation.
Sample security	The measures taken to ensure sample security.	Core has a modern Chain of Custody in place during sample submission. Company geologists supervise all sampling and subsequent storage in the field and during transport to the point of dispatch to the assay laboratory. The assay laboratory audits the samples on arrival and reports any discrepancies back to the Company.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audits or reviews have been carried out for the data associated with these drillholes or samples.



### Section 2 Reporting of Exploration Results

#### (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests,	Drilling by CXO took place on EL29698, which is 100% owned by CXO via its 100%-owned subsidiary Lithium Developments Pty Ltd.
	historical sites, wilderness or national park and environmental settings.	The tenement is in good standing with the NT DITT Titles Division.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the	There are no registered heritage sites covering the work area.
	area.	The prospect area comprises Vacant Crown Land.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The history of mining in the Bynoe area dates back to 1886 when tin was discovered by Mr. C Clark.
		By 1890 the Leviathan Mine and the Annie Mine were discovered and worked discontinuously until 1902.
		In 1903, Hang Gong Wheel of Fortune was found, and 109 tons of tin concentrates were produced in 1905. In 1906, the mine produced 80 tons of concentrates.
		By 1909 activity was limited to Leviathan and Bells Mona mines in the area with little activity in the period 1907 to 1909.
		The records of production for many mines are not complete, and in numerous cases changes have been made to the names of the mines and prospects which tend to confuse the records still further. In many cases the published names of mines cannot be linked to field occurrences.
		In the early 1980s the Bynoe Pegmatite field was reactivated during a period of high tantalum prices by Greenbushes Tin which owned and operated the Greenbushes Tin and Tantalite (and later spodumene) Mine in WA. Greenbushes Tin Ltd entered into a JV named the Bynoe Joint Venture with Barbara Mining Corporation, a subsidiary of Bayer AG of Germany.



		Greenex (the exploration arm of Greenbushes Ltd) explored the Bynoe pegmatite field between 1980 and 1990 and produced tin and tantalite from its Observation Hill Treatment Plant between 1986 and 1988.
		They then tributed the project out to a company named Fieldcorp Pty Ltd who operated it between 1991 and 1995.
		In 1996, Julia Corp and Greenex drilled RC holes into representative pegmatites in the field, but like all of their predecessors, did not assay for Li or Au (except Au at Golden Boulder).
		Since 1996 the field has been defunct until recently (2016) when exploration has begun on ascertaining the lithium prospectivity of the Bynoe pegmatites.
		The NT geological Survey undertook a regional appraisal of the field, which was published in 2005 (NTGS Report 16, Frater 2005).
		Liontown drilled the first deep RC holes at BP33, Hang Gong and Booths in 2016, targeting surface workings dating back to the 1980s. The operators at that time were seeking Tin and Tantalum.
		Core subsequently drilled BP33, Grants, Far West, Central, Ah Hoy and a number of other prospects in 2016.
		After purchase of the Liontown tenements in 2017, Core drilled Lees, Booths, Carlton and Hang Gong.
		In subsequent years approximately 50 prospects have been drilled to one degree or another by Core.
		Core has now drilled several deposits to a detailed level, allowing them to be estimated as a Mineral Resource, and in some cases a Reserve.
Geology	Deposit type, geological setting and style of mineralisation.	The prospect lies in the northern portion of a swarm of complex zoned rare element pegmatite field, which comprises the 55km long by 10km wide West Arm – Mt Finniss pegmatite belt (Bynoe Pegmatite Field; NTGS Report 16). The main pegmatites in this belt include Mt Finniss, Grants, BP33, Hang Gong and Sandras.



		These pegmatites have been the focus of Core's lithium exploration at Finniss to date. The Finniss pegmatites have intruded early Proterozoic shales, siltstones and schists of the Burrell Creek Formation which lies on the northwest margin of the Pine Creek Geosyncline. To the south and west are the granitoid plutons and pegmatitic granite stocks of the Litchfield Complex and Cullen Batholith. The source of the fluids that have formed the intruding pegmatites is generally accepted as being the Two Sisters Granite to the west of the belt, and which probably underlies the entire area at depths of 5-10 km. In more recent times, Core has re-mapped part of the southern area as South Alligator Group, based on geophysics and drilling data that suggests reduced rock types. A concealed pluton has also been interpreted at Ringwood on the basis of geophysics, large pegmatites and a localised metamorphic aureole. Lithium mineralisation has been identified historically as occurring at Bilatos (Picketts) and Saffums 1 (both amblygonite) but more recently Liontown and Core have identified spodumene at numerous other prospects, including Grants, BP33, Booths, Lees, Hang Gong, Ah Hoy, Far West Central and Sandras.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Drill hole information for all drill holes has previously been reported.
	easting and northing of the drill hole collar	
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	dip and azimuth of the hole	
	down hole length and interception depth	
	hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	



Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	Sample compositing reported here are calculated length weighted averages of the assays. Length weighted averages are acceptable method because the density of the rock (pegmatite) is constant. 0.4% Li <sub>2</sub> O was used as lower cut off grades for compositing and reporting intersections with allowance for including up to 3m of consecutive drill material of below cut-off grade (internal dilution).
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	The oblique nature of drillholes with respect to geology is discussed above. Because of the dip of the hole, drill intersections are apparent thicknesses and overall geological context is needed to estimate true thicknesses. Refer to figures in report.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures and Tables in the release.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All exploration results for drilling undertaken have been previously reported.
		All meaningful and material data has been reported either within this JORC Table or the body of the report.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Future work may include further infill RC or diamond drilling to better constrain the geological and grade continuity with a view to upgrading parts of the resource.



### Section 3 Estimation and Reporting of Mineral Resources

#### (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation	A data check of source assay data and survey data has been undertaken and compared to the database. No translation issues have been identified. The data was validated during the interpretation of the mineralisation, with no significant errors identified. Only RC and DDH holes have been included in the MRE.
	purposes. Data validation procedures used.	Data validation processes are in place and run upon import into Micromine to be used for the MRE. Checks included: missing intervals, overlapping intervals and any depth errors.
		A DEM topography to DGPS collar check has been completed.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate	Graeme McDonald (CP) has undertaken several site visits while drilling has been underway. Most recently in February 2021. A review of the drilling, logging, sampling and QAQC procedures has been undertaken. All processes and procedures were in line with industry best practice.
	why this is the case.	
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The geological interpretation is considered robust due to the nature of the mineralisation. The mineralisation is hosted within the pegmatite. The locations of the hanging wall and footwall of the pegmatite intrusion are well understood with drilling
	Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation.	which penetrates both contacts. Diamond drill core and reverse circulation drill holes have been used in the MRE. Lithology, structure, alteration and mineralisation data has been used to generate the mineralisation model. The primary assumption is that the mineralisation is hosted within
	The use of geology in guiding and controlling Mineral Resource estimation.	a structurally controlled pegmatite, which is considered robust. Due to the close spaced nature of the drilling data and the geological continuity conveyed by this dataset, no alternative interpretations have been considered.
	The factors affecting continuity both of grade and geology.	The mineralisation interpretation is based on a cut-off grade of 0.4% Li <sub>2</sub> O, hosted within the pegmatite.
		The pegmatite is considered to be continuous over the length of the deposit. It thins and pinches out to the north and south. The mineralisation is contained within the thicker parts of the modelled pegmatite and appears to plunge to the south. A non-mineralised wall rock phase of 1-2m thickness is often present. A single grade domain has been identified and estimated using a hard boundary.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or	The lithium is hosted within a 410m long section of mineralised pegmatite which strikes NNE and averages 25-30m in true width.



	otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	The pegmatite is sub-vertical to steeply east dipping and has been intersected up to a depth of approximately 300m below surface.						
		Whilst continuous, the pegmatite body does appear to narrow to the north and south. The pegmatite is deeply weathered to depths of approximately 50m below surface.						
Estimation and Modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation	Grade estimation of lithium has been completed using Ordinary Kriging (OK) into mineralised and unmineralised pegmatite domains using Micromine software. Variography has been undertaken on the grade domain composite data. Variogram orientations are largely controlled by the strike and dip of the mineralisation.						
	parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software	Previous estimates are available for comparative analysis and have been used to inform the current Mineral Resource Estimate. A check estimate using an alternative estimation technique (ID2) has also been undertaken.						
	and parameters used.	No assumptions have been made regarding recovery of any by-products.						
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Fe is considered to be a deleterious element. However, it is known that Fe contamination exists due to the use of steel drill rods, bits and steel milling equipment. By comparing RC and DD assays as well as data from blanks and check assays undertaken at an independent umpire laboratory using non-steel-based tungsten carbide mills, the level						
	The assumptions made regarding recovery of by-products.	of contamination was shown to be both substantial and highly variable and difficult correct. For this reason, Fe has not been estimated as it is known that the raw data is contaminated and will therefore result in an estimate that is misleading. No other deleterious elements have been considered and therefore estimated for this deposit The data spacing varies considerably within the deposit ranging from surface drill ho at an approximate spacing of 25 m by 30 m, to deep exploration drill holes at spacing greater than 50 m by 30 m. A parent block size of 5 m (X) by 10 m (Y) by 10 m (Z) with						
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).							
	In the case of block model interpolation, the block size in relation to the average sample	sub-block size of 1 m (X) by 2.5 m (Y) by 2.5 m (Z) has been used to define the mineralisation, with the lithium estimated at the parent block scale.						
	spacing and the search employed. Any assumptions behind modelling of selective mining units.	Pass 1 estimation has been undertaken using a minimum of 4 and a maximum of 20 samples into a search ellipse with a radius of 50m, with samples from a minimum of two drill holes. 66% of the blocks were estimated.						
	Any assumptions about correlation between variables.	Pass 2 estimation has been undertaken using a minimum of 4 and a maximum of 20 samples into a search ellipse with a radius of 100m, with samples from a minimum of two						
	Description of how the geological interpretation was used to control the resource estimates.	drill holes. 26% of the blocks were estimated. Pass 3 estimation has been undertaken using a minimum of 4 and a maximum of 20 samples into a search ellipse with a radius of 200m, with samples from a minimum of two drill holes. 6% of the blocks were estimated.						
	Discussion of basis for using or not using grade cutting or capping.	No selective mining units are assumed in this estimate.						



	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Lithium only has been estimated within the lithium mineralised domain. No correlation between variables has been assumed. The mineralisation and geological wireframes have been used to flag the drill hole intercepts in the drill hole assay file. The flagged intercepts have then been used to create composites in Micromine. The composite length is 1m in all data. The influence of extreme sample distribution outliers in the composited data has been determined using a combination of histograms and log probability plots. It was decided that no top-cuts need to be applied. Model validation has been carried out, including visual comparison between composites and estimated blocks; check for negative or absent grades; statistical comparison against the input drill hole data and graphical plots.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnes have been estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	For the reporting of the Mineral Resource Estimate, a 0.75 $\text{Li}_2\text{O}\%$ cut-off has been used.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The current DFS concluded that the Grants deposit can be developed via standard open cut mining operations followed by underground mining accessed via a portal in the open pit. Processing will be undertaken at a processing facility to be constructed on site. Mining method selected for the underground deposit is up-hole retreat mining with back fill, as a result of the vertical nature of the ore body and competent host rock ground conditions. As part of the DFS, preliminary mine planning and scheduling was undertaken considering possible waste and process residue disposal options and environmental impacts. Full details of mining factors and assumptions are documented within the DFS.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral	Based on 4 phases of metallurgical test work, the DFS concluded that the operation could produce a concentrate with a target grade of 5.5% Li <sub>2</sub> O with recoveries of >70%. This occurs via a simple process of crushing, screening and dense media separation. During testwork it was observed that product impurities were consistently below reject specifications. Full details of metallurgical factors and assumptions are documented within the DFS.



Environmental factors or assumptions	Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	The Finniss Lithium Project approvals have been secured for 7 years through the Notice of Alteration. The Notice of Alteration allows for contributions from Grants, BP33, Carlton and Hang Gong with crushing/screening/concentration/tailings all approved for 7 years at the Grants processing facility. As part of the Definitive Feasibility Study, geotechnical studies have been undertaken as well as waste characterisation and groundwater modelling.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Water immersion and pycnometer density determinations have been undertaken by NAL on samples from 10 diamond core drill holes spread across the Grants deposit. Analysis of this data was used in the determination of the fresh pegmatite density for assignment in the Mineral Resource estimate. For fresh pegmatite, specific gravity is estimated into the block model via a Li <sub>2</sub> O based regression equation, using the block grade estimations. The regression equation is based upon the correlation between Li <sub>2</sub> O% and SG. The resulting regression equation is: SG = 0.0666 x Li <sub>2</sub> O% + 2.613 Bulk density of oxide and Burrell Creek lithologies were assigned from averages obtained from completed testwork programs.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input	The resource classification has been applied to the Mineral Resource estimate based on the drilling data spacing, grade and geological continuity, and data integrity. The classification takes into account the relative contributions of geological and data quality and confidence, as well as grade confidence and continuity.



Audits or reviews	<ul> <li>data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	Confidence in the Measured and Indicated mineral resources is sufficient to allow application of modifying factors within a technical and economic study. The classification reflects the view of the Competent Person. This Mineral Resource estimate has not been audited by an external party.
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement relates to global estimates of tonnes and grade. No production records have been supplied, so no comparison or reconciliation has been made. Historically, only a small amount of tin/tantalum has been produced from weathered pegmatite from shallow pits by Greenbushes in the 1980's. This is well above the top of fresh rock reported in the current resource estimate.



### Section 4 Estimation and Reporting of Ore Reserves BP33, Carlton and Grants Underground, Grants Open and Hang Gong Open Pit

#### (Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource models as described in Table 1 - Section 3 were used as an input to the mining model. Carlton (24 February 2020), BP33 (4 February 2020) and Grants (26 February 2021). The Mineral Resource models as described in the 15 June 2020 ASX release for Hang Gong apply to this study.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	The Competent Person for Open Pit Ore Reserves is currently the Chief Operating Officer and has visited the site on numerous occasions. Whilst preparing this estimate the Competent Person has satisfied himself that the data and analysis used in this estimate is appropriate for the proposed operating conditions for the project. The Competent Persons for Underground Ore Reserves (Mr Curtis Smith MAusIMM (CP), 311458) completed a site visit of the BP33, Carlton and Grants sites on 7 November 2019.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The study is a Scoping Study, Measured, Indicated and Inferred Mineral Resources for the Grants, BP33, Carlton, and Hang Gong Mineral Resources have been included.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The Mineral Resource provided was a geologically domained resource; this geological model was modified for ore loss and dilution and evaluated to determine which blocks produced cash surplus when treated as ore. The Ore Reserve was estimated using a 0.75% Li <sub>2</sub> O cutoff. The cut-off grade



		contemplates all pre-tax costs associated with the processing and selling of a $Li_2O$ concentrate product. The following costs:
		<ul> <li>Incremental ore haulage to the process plant RoM</li> <li>Stockpile re-handle</li> <li>Processing</li> <li>Road transport</li> <li>Ship loading</li> <li>Royalties</li> <li>General overhead cost and administration</li> </ul>
		are all easily paid for by the 0.75% Li <sub>2</sub> O cutoff. The revenue was determined using an average price for Li <sub>2</sub> O concentrate of US\$687 per tonne and an exchange rate of US\$0.70 per AU\$1.00. Process recoveries were applied as outlined below under "Metallurgical Factors or Assumptions".
		The breakeven cut-off for underground mining at Carlton, BP33, and Grants Underground is A\$72.97/t NSR. A marginal cut-off grade of A\$75/t NSR or 0.61% Li <sub>2</sub> O has been selected to form the basis of the more detailed underground design.
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre- strip, access, etc. The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre- production drilling.	Pit optimisations & sensitivity analysis were completed using Whittle software to produce a range of pit shells using recommended slope design criteria, mining dilution, ore loss and processing recoveries together with mining, processing, transport and sales cost estimates, and revenue projections to form the basis for detailed pit designs and subsequent mining and processing schedules.
		A conventional open pit mine was chosen as the mining method for Hang Gong. Ore occurs approximately 50m below surface & 70m below surface for Hang Gong respectively, meaning pre- stripping is required. Pre-stripping has been allowed for. Selective mining methods of the ore zone have been assumed with a Smallest Mining Unit (SMU) size of 5m x 5m x 2.5m (XYZ) applied to the resource block model regularisation process to produce a diluted mining model. This SMU size was selected as the most appropriate block size considering the mining fleet and mining methods proposed by the preferred Mining Contractor Tender submission. Selective ore mining will also be supported by machine guidance systems, production blasthole grade control processes, and the
		highly visual nature of ore in comparison to the waste material. Pit slope design criteria is based on a DFS geotechnical study completed by SRK consultants in September 2018. Design sectors are based on the weathered, transitional and fresh rock zones as
	The major assumptions made and Mineral Resource model used for pit and	they occur vertically through the mining sequence. The slope design criteria selected for pit designs is based on a non-depressurised slope.
	stope optimisation (if appropriate). The mining dilution factors used.	The mine schedule is based on a processing plant nameplate capacity of 1.0Mtpa (dry) and the mining excavator fleet proposed by the preferred Mining Contractor that has an average annual mining capacity of 16 Mtpa (dry) over the mine life. Grants will be mined in two stages with an initial
	The mining recovery factors used.	pit followed by a final cutback, with Hang Gong mined in one stage. The diluted mining model has



Any minimum mining widths used. The manner in which Inferred Mineral

Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.

The infrastructure requirements of the selected mining methods.

been used to develop the equipment based mine schedule for both mines deposits and assumes effective operation of the mining fleet and is based on realistic and benchmarked utilisation productivity estimates. Ore loss and Dilution factors are based on the diluted resource block models developed from the regularisation process. Global ore loss and dilution results for both pits are:

Hang Gong Resource	Ore (dry tonnes)	Li <sub>2</sub> O%	% Ore Tonnage
Undiluted	2,009,844	1.25	-
Ore Loss (OL)	380,145	1.25	18.9%
Dilution (D)	248,835	0.09	12.4%
Diluted (Undil - OL + D)	1,878,534	1.13	-6.5%

Ramp widths for pit designs vary from 19m for single to 26m for double lane at a maximum operating gradient of 10%.

Minimum mining widths for the pit design are 40m with tight digging areas and "good-bye" cuts at the base of the pit a minimum of 20m.

Inferred Mineral Resource for the purpose of the Ore Reserve estimate is treated as waste which has been economically carried by the Ore. In addition, Inferred Resources were included in several pit optimisation runs to ensure infrastructure and waste dumps were not located on potential future economic resource.

Mining Infrastructure required to support the mine plan includes waste rock dumps, ROM pad, haul roads, crusher and processing plant, tailings storage facility, explosives storage facility, water storage, workshops and other buildings required for a contract mining operation.

The mining method selected for the Carlton deposit is sublevel retreat mining. Access to the Carlton underground deposit is via a portal in the planned Grants open pit and a 1,200 m decline. The 6.0 m x 6.0 m decline will also act as the primary ventilation intake into the mine with the exhaust to surface via a return a raise bored return air raise (RAR). Internal pillars are utilised for overall stability. The narrow (5 to 15 m) ore body width, vertical orientation, and competent host rock ground conditions and internal rock pillars allows for sublevel open stoping mining without back fill to be utilised as a viable low-cost mining method.

The mining method selected for the BP33 deposit is sublevel retreat mining. Access to the BP33 underground deposit is via a ~400 m decline from the surface box-cut to a ramp system connecting the levels to an estimated depth of ~320 m below surface. The BP33 exhaust is via a dedicated raise bored RAR to surface. Internal pillars are utilised for overall stability. The narrow (5 to 25 m) ore body width, vertical orientation, and competent host rock ground conditions and



		internal rock pillars allows for sublevel open stoping mining without back fill to be utilised as a viable low-cost mining method.					
		The mining method selected for the Grants underground deposit is up-hole retreat mining. The Grants underground deposit is planned as a transition from Grants open pit to underground, access to the Grants underground deposit is via a portal in the Grants open pit and a 1,510 m decline. The 6.0 m x 6.0 m decline will also act as the primary ventilation intake into the mine with the exhaust to surface via a dedicated ventilation drive in to the Grants open pit.					
		BP33, Carlton and Grants underground assumptions:					
		<ul> <li>Stoping Recoveries – 95 %Dilution – 10 %</li> <li>Shape Height (Sub level) – 30 m.</li> <li>Minimum Width (Across Strike) – 5 m.</li> <li>Maximum Width (Across Strike) – 30 m.</li> </ul>					
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	For Lithium ore the Scoping Study economics considered processing comprising dense media gravity separation (DMS) of the 0.5 mm to 6.3 mm fraction after P100 crushing to 6.3 mm. This process is considered the lowest risk methodology for the ore type comprising zoned, very coarse					
	Whether the metallurgical process is well-tested technology or novel in nature.	grained, spodumene- pegmatite. The rejects will be stockpiled for possible future use, but nil revenue was attributed to them. The minus 0.5 mm fines are to be placed in a purpose-built tailings storage facility (TSF) but essentially thrown away.					
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements.	Four generations of metallurgical test work were used to arrive at the final process flowsheet and the competent person visited comparable operations in WA to satisfy himself that the flowsheet of a full-scale plant is applicable. The introduction of a re-crush facility on DMS middlings was key to consistently producing grades of 5.5% or better at acceptable recoveries of over 70%. This necessitated a primary and secondary DMS circuit on the course +2 mm fraction, so that the secondary coarse DMS floats could be re-crushed and recycled. Separating the -2 mm +0.5 mm fines and necessary to ensure the plant design was sufficiently robust to cater for any unexpected variability in the ore body. Processing for the underground is based on the Feasibility study prepared by the Primero Group for the DMS plant.					
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.						
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?						

Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of	The Grants Lithium Project has been assessed under the Environmental Assessment Act 1982 (EA Act) via an Environmental Impact Statement. The Grants Lithium Project has also achieved Mining Management Plan approval. Authorisation number 1021-01.					
	waste rock characterisation and the consideration of potential sites, status of design options considered and, where	A Notice of Intent for BP33 is currently being assessed under the new Environment Protection Act (EP Act).					
	applicable, the status of approvals for	A Mineral Lease over the BP33 area is currently under application					
	process residue storage and waste dumps should be reported.	A variation to the Grants EIA is being assessed under the current EA Act to process the ore mined at BP33 & Carlton.					
		The Carlton prospect is situated on the granted Grants Mineral Lease.					
		Core believes that there are no reasons why these approvals will not be achieved in the time frames to meet their development time lines.					
Infrastructure	The existence of appropriate infrastructure: availability of land for	Sufficient land exists to locate all proposed infrastructure, tailings storage facilities (TSF) and waste rock dumps required for the project.					
	plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	Product export will be via Darwin Port facilities, 88 km by an entirely sealed road. A formal application for the access has been made. Darwin Port is now conducting a Feasibility on the projects access requirements.					
		A water balance assessment has determined the water resources from the existing Observation Hill dam will need to be augmented by a second dam to the east of the project and both of these dams will be sufficient to meet the needs of the operation. An ancillary Mineral Lease over the Observation Hill dam area is under application.					
		The workforce required for the operation will be engaged on a residential basis.					
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.	Capital costs: Capital estimates are based on the current forecast project capital costs of A\$128 million (inclusive of contingency and pre-production operating costs but excluding the underground capital costs). The pre-production capital component is \$89 million. Operating Costs:					
	The methodology used to estimate operating costs.	Open Pit mining costs are based on Mining Contractor tender submissions with a preferred contractor announced to the ASX on the 24th January 2019. Preferred contractor costs have been revalidated for the DFS Update and benchmarked against competitive mining contract					
	Allowances made for the content of deleterious elements.	submissions. Mining Costs also consider activities for mining team operating costs, management and maintenance, mobile plant maintenance infrastructure, ore rehandle and crusher feed, clear					
	The source of exchange rates used in the study.	and grub, top soil management, and rehabilitation and mine closure criteria. The life of mine average open pit mining cost was estimated to be \$10.79 per bcm of material mined. The					
	Derivation of transportation charges.	processing costs was estimated to be \$24.38 per tonne of ore treated and based upon tender submissions for Crushing & Screening and Operating & Maintenance proposal from Primero Group					
	The basis for forecasting or source of treatment and refining charges,	for the DMS plant. General and Administration costs were prepared by Core Lithium and estimated to be \$16.15 per tonne of concentrate produced. Transport costs were derived from Qube Bulk who have been awarded preferred contractor status. The accepted tender rate is \$8.62/t of product.					

	penalties for failure to meet	NT and third party royalties have been calculated and included within the project financial model.					
	specification, etc. The allowances made for royalties	Total operating costs per tonne of concentrate produced are estimated to be A\$520 excluding pre- strip costs which are included in the capital cost noted above.					
	payable, both Government and private.	All capital and operating costs have been estimated to a Scoping Study level of confidence +/-30%					
		Mining costs were prepared by OreWin Pty Ltd. and derived from quotations from multiple experienced mining contractors, other suppliers, and current project costs. The majority of development and production costs were derived from the quotations.					
		Mining costs were benchmarked against similar projects. Mining costs are to a Feasibility Study level. Costs have been calculated for a 1.0 Mtpa mining rate for BP33 and Carlton deposits and a 0.5 Mtpa mining rate for Grants underground.					
		Underground Capital Costs:					
		<ul> <li>BP33 Underground Mining Capital costs: A\$46.87 M</li> <li>Carlton Underground Mining Capital costs: A\$55.18 M</li> <li>Grants Underground Mining Capital costs: A\$18.83 M</li> </ul>					
		Processing costs were prepared by Primero, Owners Costs and G&A costs were prepared by Core. Finniss Underground all in operating unit costs:					
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	Core Lithium commissioned Roskill to provide Li <sub>2</sub> O price forecasts. The commissioned forecasts provided forecast data well beyond the duration of the project in Real and Nominal terms for a 6.0% spodumene concentrate. A factor of 96.67% was used to derive the price for a 5.8% spodumene concentrate. Revenue was calculated as the in-situ value after allowances have been made for:					
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co- products.	<ul> <li>Recovery to concentrate.</li> <li>Concentrate transport.</li> <li>Taxes and Royalties.</li> <li>Lithium concentrate recovery is a constant 71.70% and occurs at all feed grades.</li> <li>Gross revenue assumes 100% of Spodumene 5.8% Payable.</li> </ul>					
Market assessment	The demand, supply and stock situation	A Long term Spodumene price study has been carried out by Roskill.					
	for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	The long-term price (real) for Spodumene 6.0% used in the study:					
		<ul> <li>2021 US\$700</li> <li>2022 US\$761</li> <li>2023 US\$708</li> </ul>					



	Revenue	Units	NPV (8% -20%	-10%	O%	10%	20%
				Discount			
	Grants U/G	A\$M	23.84	20.33	18.96	14.83	9.06
	BP33	A\$M	136.28	124.30	110.12	101.37	95.19
	Carlton	A\$M	46.97	36.10	24.97	11.51	-0.14
	Costs	Units	-20%	-10%	0%	10%	20%
			NPV (8%	Discount	Rate)		
	Grants U/G			20.67	18.96	17.39	15.95
							90.46
							<b>12%</b>
			NPV	<b>C</b> C(	001	1001	1001
		I	<u> </u>		I	I	
	Grants U/G	A\$M	25.28	21.10	18.96	14.94	10.81
inputs.	BP33	A\$M	150.48	129.21	110.12	97.55	88.61
NPV ranges and sensitivity to variations in the significant assumptions and	Carlton	A\$M	47.40	35.34	24.97	14.24	5.59
	AUD: USD	Units	0.60	0.65	0.70	0.75	0.80
these economic inputs including		,		•	•		
produce the net present value (NPV) in the study the source and confidence of							oodumer
requirements prior to a supply contract.	The economic	analysis	used the F	easibility	Study assu	umptions	for BP33.
For industrial minerals the customer specification testing and acceptance							
for these forecasts.	• 2028 L	JS\$771					
along with the identification of likely							
	<ul> <li>market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and</li> </ul>	<ul> <li>along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>Discount Ratical Carlton</li> <li>Discount Ratical Carlton</li> <li>BP33</li> <li>Grants U/G</li> </ul>	<ul> <li>along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>Discount Rate Units Carlton A\$M</li> <li>BP33 A\$M</li> <li>Crants U/C A\$M</li> <li>Discount Rate Units Carlton A\$M</li> <li>BP33 A\$M</li> <li>Crants U/C A\$M</li> </ul>	along with the identification of likely market windows for the product.2025 US\$872 2026 US\$811 2027 US\$787 	along with the identification of likely market windows for the product. <ul> <li>2025 US\$872</li> <li>2026 US\$811</li> <li>2027 US\$787</li> <li>2028 US\$771</li> <li>2029 US\$723</li> <li>2030 US\$726</li> </ul> The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of thesse economic inputs including estimated inflation, discount rate, etc.       The economic analysis used the Feasibility Underground mines. After tax sensitivities up processing costs, mining costs, and capital         NPV ranges and sensitivity to variations in the significant assumptions and inputs. <ul> <li>NPV (8% Discount</li> <li>A\$M</li> <li>47.40</li> <li>35.34</li> <li>BP33</li> <li>A\$M</li> <li>25.28</li> <li>21.10</li> </ul> <ul> <li>NPV (8% Discount</li> <li>Carlton</li> <li>A\$M</li> <li>25.28</li> <li>21.10</li> </ul> <ul> <li>NPV (8% Discount</li> <li>Carlton</li> <li>A\$M</li> <li>25.28</li> <li>21.00</li> </ul> <ul> <li>NPV (8% Discount</li> <li>Carlton</li> <li>A\$M</li> <li>22.54</li> <li>20.67</li> <li>Carlton</li> <li>A\$M</li> <li>22.54</li> <li>20.67</li> </ul> <ul> <li>NPV (8% Discount</li> <li>Costs</li> <li>Units</li> <li>20% 10%</li> <li>BP33</li></ul>	<ul> <li>along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>Carlton A\$M 47.40 35.34 24.97</li> <li>BP33 A\$M 150.48 129.21 110.12</li> <li>Grants U/G A\$M 25.28 21.10 18.96</li> <li>Carlton A\$M 35.93 29.95 24.97</li> <li>BP33 A\$M 134.79 121.74 110.12</li> <li>Grants U/G A\$M 22.54 20.67 18.96</li> <li>Carlton A\$M 46.97 36.10 24.97</li> <li>BP33 A\$M 136.28 124.30 110.12</li> </ul>	<ul> <li>along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> <li>NPV (8% Discount Rate)</li> <li>NPV (8% Biscount Rate)</li>     &lt;</ul>



		Carlton	A\$M	-6.11	8.88	24.97	38.90	52.54		
		BP33	A\$M	75.36	91.89	110.12	135.57	158.95	_	
		Grants U/G	A\$M	4.54	12.57	18.96	22.20	27.30	_	
		The combined • After * • IRR =	tax Net F			rground fi scount Ra				
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	catchments c	of West A reseeable	rm and Ch e future de	narlotte Ri evelopmer	ver were c nts. These	onsidered are being <sup>-</sup>	in the cor	Cox Peninsula region and htext of the existing and ssessed in the BP33 NOI.	
		The Carlton p	rospect i	s located o	on the gra	nted Gran <sup>.</sup>	ts Mineral	Lease ML	31726.	
		Core Lithium operate.	has not i	dentified (	or encoun	tered any o	obstructio	n to gainir	ng a social licence to	
		The mineral L an Aboriginal							s. The project was issued	
Other	To the extent relevant, the impact of the following on the project and/or on the	The project area is located on Vacant Crown Land, the underlying tenure EL29698 is owned 100% by Core. The mineral lease ML31726 is granted.								
	estimation and classification of the Ore Reserves:	The Darwin area is prone to cyclone activity throughout December, January, February, March, and April each year. Production estimates have considered the impact of such events.								
	Any identified material naturally occurring risks.		vorkshop						curring material risks have	
	The status of material legal agreements and marketing arrangements.									
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study.									
	Highlight and discuss the materiality of any unresolved matter that is dependent									



	on a third party on which extraction of the reserve is contingent.					
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	Proved and Probable Ore Reserves were estimated for the Finniss BP33 and Carlton dep Measured Mineral Resources were converted to Proved Ore Reserves and Indicated Min Resources were converted to Probable Ore Reserves with the application of modifying f Probable Ore Reserves have been derived from Measured Mineral Resources. The effect the Ore Reserves is 22 July 2021.				
	The proportion of Probable Ore Reserves that have been derived from Measured		Mt	Li <sub>2</sub> O (%)	Contained Li <sub>2</sub> O (kt)	
	Mineral Resources (if any).	Open Pit				
		Grants				
		Proved	1.8	1.5%	26.4	
		Probable	0.3	1.4%	4.7	
		Total	2.1	1.4%	31.0	
		Hang Gong				
		Proved	0.0	0.0%	-	
		Probable	1.1	1.2%	13.3	
		Total	1.1	1.2%	13.3	
		Total - Open Pit				
		Proved	1.8	1.5%	26.4	
		Probable	1.4	1.3%	17.9	
		Total	3.2	1.4%	44.3	
		Underground				
		Grants				
		Proved	0.0	1.0%	0.2	
		Probable	0.2	1.5%	3.4	
		Total	0.3	1.4%	3.6	
		BP33				
		Proved	1.3	1.4%	18.4	



Probable	1.0	1.4%	13.8
Total	2.3	1.4%	32.2
Carlton			
Proved	0.6	1.2%	7.1
Probable	1.0	1.0%	10.7
Total	1.6	1.1%	17.8
Total - Underground			
Proved	1.9	1.3%	25.7
Probable	2.3	1.2%	27.8
Total	4.2	1.3%	53.6
Total – All Mining Methods			
Proved	3.8	1.4%	52.1
Probable	3.7	1.2%	45.8
Total	7.4	1.3%	97.9

In addition to the Ore Reserves listed above the Scoping Study includes 2.03 Mt at 1.2 %  $Li_2O$  of Inferred material from the underground mines and 0.2 Mt at 1.2 %  $Li_2O$  Inferred material from the open cut. Additional 0.13 Mt at 2.0 %  $Li_2O$  Measured and Indicated material became economical from the underground mines with the addition of Inferred material.

Open Cut	Mt	Li <sub>2</sub> O (%)	Contained Li <sub>2</sub> O (kt)
Hang Gong	0.2	1.2	1.9
Total	0.2	1.2	1.9
Underground	Mt	Li <sub>2</sub> O (%)	Contained Li <sub>2</sub> O (kt)
Grants	0.3	1.3	4.1
BP33	0.6	1.4	8.3
Carlton	1.2	1.2	14.6
Total	2.2	1.3	27.0
Total – All Methods	2.4	1.2	28.9



		Note: Totals within this table may have been adjusted slightly to allow for rounding.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	At this time no audits have been undertaken.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	The study meets the Feasibility Study requirements as defined under the JORC Code and is considered to have an accuracy of +/- 30%.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	